I. Listing of Claims

1. (Previously Presented): A pusher assembly of a stent delivery system for use in a target duct or vessel having an acute bend at a known general location in the body of a patient, the pusher assembly comprising:

a first tubular portion being a non-rigid polymer tube and having a predetermined outside diameter;

a second tubular portion having a part extending distally from the first tubular portion, the second tubular portion including a flexible section and a stent-carrying section located distally to the flexible section; and

a soft pusher member configured to urge a self-expanding preloaded stent from an introducer catheter within which the preloaded stent is slidably disposed, the introducer catheter having a passageway to define an inside diameter of the introducer catheter, the soft pusher member having a tapered proximal surface being disposed along the second tubular portion at a location which is either proximal to or within the stent-carrying section, the soft pusher member being made of a polymer, wherein the soft pusher member is adapted to be positioned at the acute bend in the body, wherein the soft pusher is configured to cooperate with the preloaded stent to absorb preload pressure of the preloaded stent and conform to a distal end of the stent to reduce the likelihood of partial deployment of the stent when the soft pusher member is positioned at the acute bend in the body of the patient, the outside diameter of first tubular portion being slightly less than the inside diameter of the introducer catheter to effectively occupy the inside diameter so as to provide rigidity and support for pushing the stent through the introducer catheter and to reduce the likelihood and severity of kinking in the introducer catheter.

2. (Original): The assembly of Claim 1 wherein the flexible section of the second tubular portion has a preselected length and a location along the pusher assembly such that when the pusher assembly and the preloaded stent are disposed within the introducer catheter and are subjected to lateral bending stresses at the known general location in the body, the flexible section of the second tubular portion traverses the known general location in the body, whereby the likelihood of a kink occurring in the introducer catheter is greatest within a region corresponding to the region of greatest flexibility of the pusher assembly.

3. (Original): The assembly of Claim 1 wherein the soft pusher member includes a radiopaque filler.

4. (Original): The assembly of Claim 1 wherein the polymer of the soft pusher member is a low density polymer.

5. (Original): The assembly of Claim 1 wherein the polymer of the soft pusher member is polytetrafluoroethylene.

6. (Original): The assembly of Claim 1 wherein the second tubular portion has a smaller outer diameter than that of the first tubular portion.

7. (Original): The assembly of Claim 6 wherein the second tubular portion comprises a metal-reinforced polymer material.

8. (Original): The assembly of Claim 7 wherein the metal-reinforced polymer material comprises braided polyimide tubing.

9. (Original): The assembly of Claim 1 wherein the second tubular portion comprises a nickel-titanium alloy.

10. (Original): The assembly of Claim 1 wherein the second tubular portion extends to a distal end, the second tubular portion includes a distal tip affixed about the distal end, the stent-carrying section and the flexible section being comprised of a single continuous element, the preloaded stent being positioned along the stent-carrying section such that the preloaded stent is disposed between and in contact with the distal tip and the soft pusher member, the distal tip being tapered at its proximal end to receive the stent.

11. (Previously Presented): A stent delivery system for use in target duct or vessel having an acute bend at a known general location in the body of a patient, the system comprising:

a pusher assembly including a soft pusher member configured to urge a preloaded stent from an introducer catheter within which the preloaded stent is slidably disposed, the introducer catheter having a passageway to define an inside diameter of the introducer catheter, the pusher assembly comprising a first tubular portion being a non-rigid polymer tube having a predetermined outside diameter and a second tubular portion, at least a part of the second tubular portion extending distally from the first tubular portion, the second tubular portion including a flexible section and a stent-carrying section located distal to the flexible section, the soft

pusher member being disposed along the second tubular portion at a location which is either proximal to or within the stent-carrying section, the soft pusher member being made of a low density polymer and adapted to be positioned at the acute bend in the body, wherein the soft pusher member is configured to cooperate with the preloaded stent to absorb preload pressure of the preloaded stent and conform to a distal end of the stent to reduce the likelihood of partial deployment of the stent when the soft pusher member is positioned at the acute bend in the body of the patient during deployment of the stent, the soft pusher member having a tapered proximal surface configured to facilitate removal of the pusher assembly back through the deployed stent, the outside diameter of first tubular portion being slightly less than the inside diameter of the introducer catheter to effectively occupy the inside diameter so as to provide rigidity and support for pushing the stent through the introducer catheter and to reduce the likelihood and severity of kinking in the introducer catheter.

12. (Original): The stent delivery system of Claim 11 wherein the flexible section of the second tubular portion has a preselected length and a location along the pusher assembly such that when the pusher assembly and the preloaded stent are disposed within the introducer catheter and are subjected to lateral bending stresses at the known general location in the body, the flexible section of the second tubular portion traverses the known general location in the body, whereby the likelihood of a kink occurring in the introducer catheter is greatest within a region corresponding to the region of greatest flexibility of the pusher assembly.

13. (Original): The stent delivery system of Claim 11 wherein the soft pusher member includes a radiopaque filler.

14. (Original): The stent delivery system of Claim 11 further including the stent preloaded within a distal portion of the introducer catheter, the stent having a proximal end and a distal end opposite the proximal end, the proximal end being received by the soft pusher member to absorb preload pressure of the stent.

15. (Previously Presented): The stent delivery system of Claim 14 wherein the soft pusher member includes a face having a diameter equal to or greater than that of the preloaded stent in the introducer catheter, the proximal end of the preloaded stent being adjacent to the face of the pusher member.

16. (Original): The stent delivery system of Claim 14 wherein the stent is a self-expanding stent.

17. (Original): The stent delivery system of Claim 14 further including the introducer catheter in which the pusher assembly and the stent are slidably disposed.

18. (Original): The stent delivery system of Claim 11 wherein the second tubular portion has a smaller outer diameter than that of the first tubular portion.

19. (Original): The stent delivery system of Claim 18 wherein the second tubular portion comprises a metal-reinforced polymer material.

20. (Original): The stent delivery system of Claim 19 wherein the metal-reinforced polymer material comprises braided polyimide tubing.

21. (Original): The stent delivery system of Claim 11 wherein the second tubular portion comprises a nickel-titanium alloy.

22. (Original): The stent delivery system of Claim 11 wherein the second tubular portion extends to a distal end, the second tubular portion includes a distal tip affixed about the distal end, the stent-carrying section and the flexible section being comprised of a single continuous element, the preloaded stent being positioned along the stent-carrying section such that the preloaded stent is disposed between and in contact with the distal tip and the soft pusher member, the distal tip being tapered at its proximal end to receive the stent.

23. (Previously Presented): A stent delivery system, comprising:

an introducer catheter having a distal portion, the distal portion having a distal end, the introducer catheter having a passageway to define an inside diameter of the introducer catheter;

a stent preloaded within the distal portion of the introducer catheter, the stent having a proximal end and a distal end;

a pusher assembly including a soft pusher member configured to urge the preloaded stent from the introducer catheter within which the preloaded stent is slidably disposed, the pusher assembly being a single continuous member comprising a first tubular portion being a non-rigid polymer tube having a predetermined outside diameter and a second tubular portion integrally extending

from the first portion, the second tubular portion having a smaller diameter and a thinner wall than the first tubular portion for more flexibility, at least a part of the second tubular portion extending distally from the first tubular portion, the second tubular portion including a flexible section and a stent-carrying section located distal to the flexible section, the soft pusher member being disposed along the second tubular portion at a location which is either proximal to or within the stent-carrying section, the soft pusher member including a face having a diameter equal to or greater than that of the stent preloaded in the introducer catheter, the soft pusher member being made of a polymer and adapted to be positioned at an acute bend in the body, wherein the soft pusher member is configured to cooperate with the preloaded stent such that the face of the soft pusher member absorbs preload pressure of the preloaded stent and conforms to a distal end of the stent to reduce the likelihood of partial deployment of the stent when the soft pusher member is positioned at the acute bend in the body of the patient during deployment of the stent, the soft pusher member having a tapered proximal surface configured to facilitate removal of the pusher assembly back through the deployed stent, the outside diameter of first tubular portion being slightly less than the inside diameter of the introducer catheter to effectively occupy the inside diameter so as to provide rigidity and support for pushing the stent through the introducer catheter and to reduce the likelihood and

a distal tip affixed about the distal end of the second tubular portion, the stent being loaded between the distal tip and the face of the pusher member such that during deflection of the stent introducer apparatus, the point along the introducer catheter that receives the largest amount of bending stress and represents the more likely point where a kink would occur, is located proximal the pusher member.

24. (Original): The stent delivery system of Claim 23 wherein the second tubular portion comprises a metal-reinforced polymer material.

25. (Original): The stent delivery system of Claim 24 wherein the metal-reinforced polymer material comprises braided polyimide tubing.

26. (Original): The stent delivery system of Claim 23 wherein the second tubular portion comprises a nickel-titanium alloy.

27. (Original): The stent delivery system of Claim 23 wherein the second tubular portion further includes a stent-carrying section extending distal the flexible section, the stent-carrying section extending distally to at least the distal end of the stent.

28. (Original): The stent delivery system of Claim 27 wherein the stent is a self-expanding stent.

29-34. (Canceled)

35. (Previously Presented): A stent delivery system for use in target ducts or vessels having an acute bend at a known general location in the body of a patient, the system comprising:

a pusher assembly including:

a first tubular portion being a non-rigid polymer tube having a predetermined outside diameter;

a second tubular portion extending along the entire length of the first tubular portion, at least a part of the second tubular portion extending distally from the first tubular portion, the second tubular portion including a flexible section and a stent-carrying section located distal to the flexible section; and

a soft pusher member configured to urge a preloaded stent from an introducer catheter within which the preloaded stent is slidably disposed, the introducer catheter having a passageway to define an inside diameter of the introducer catheter, the soft pusher member being disposed along the second tubular portion at a location which is either proximal to or within the stent-carrying section, the soft pusher member being made of a low density polymer having a radiopaque filler and adapted to be positioned at the acute bend in the body, wherein the soft pusher member is configured to cooperate with a preloaded stent for to absorb preload pressure of the preloaded stent and conform to a distal end of the stent to reduce the likelihood of partial deployment of the stent when the soft pusher member is positioned at the acute bend in the body of the patient during deployment of the stent, the soft pusher member having a tapered proximal surface configured to facilitate removal of the pusher assembly back through the deployed stent, the outside diameter of first tubular portion being slightly less than the inside diameter of the introducer catheter to effectively occupy the inside diameter so as to provide rigidity and support for pushing the stent through the introducer catheter and to reduce the likelihood and severity of kinking in the introducer catheter,

the flexible section of the second tubular portion having a preselected length and a location along the pusher assembly such that when the pusher assembly and the preloaded stent are disposed within the introducer catheter and are subjected to lateral bending stresses at the known general location in the body, the flexible

section of the second tubular portion traverses the known general location in the body, whereby the likelihood of a kink occurring in the introducer catheter is greatest within a region corresponding to the region of greatest flexibility of the pusher assembly.